



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Air Quality - Part 70 Operating Permit Amendment

Facility Name: Enviva Pellets Waycross, LLC

Facility Address: 3390 Industrial Boulevard
Waycross, Georgia 31503 (Ware County)

Mailing Address: 3390 Industrial Boulevard
Waycross, Georgia 31503

Parent/Holding Company: Enviva Pellets Waycross, LLC

Facility AIRS Number: 04-13-299-00053

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Georgia Rules for Air Quality Control, Chapter 391-3-1, adopted pursuant to and in effect under the Act, the Permittee described above is issued an amendment to the Part 70 Operating Permit for:

To update annual pellet production rate, to remove major source HAPs avoidance limit, remove requirements of the boiler GACT and to incorporate requirements of the major source boiler MACT. Replace both dryer RTOs.

This Permit Amendment is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Amendment and Permit No. **2499-299-0053-V-04-0**. Unless modified or revoked, this Amendment expires simultaneously with Permit No. **2499-299-0053-V-04-0**. This Amendment may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in App No. **TV-610193** dated **October 29, 2021** and **updated on November 10, 2022**; any other applications upon which this Amendment or Permit No. **2499-299-0053-V-04-0** are based; supporting data entered therein or attached thereto; or any subsequent submittal or supporting data; or for any alterations affecting the emissions from this source.

This Amendment is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **41** pages.



Richard E. Dunn, Director
Environmental Protection Division

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PART 1.0 FACILITY DESCRIPTION**1.4 Process Description of Modification**

Enviva Pellets Waycross, LLC (hereinafter “facility”) submitted Title V Permit Amendment and 112(g) Application No. 509409 dated October 29, 2021 primarily for removing the facility-wide single HAP and combined HAP synthetic minor (SM) limits specified in existing Condition 2.1.2. Performance tests conducted in May 2021 revealed that the actual emission rates for the major hazardous air pollutants (HAPs, including acetaldehyde, formaldehyde, and methanol) were all greater than the associated emission factors in existing Condition 6.2.2. In order to maintain the production level, the facility requested to remove the single/combined HAP SM limits by submitting the case-by-case maximum achievable control technology (MACT) analysis within the 112(g) application.

On November 10, 2022, the facility submitted a supplemental application that included the proposal to replace the two existing regenerative thermal oxidizers (RTO, with ID Nos. RTO1 and RTO2) with new RTOs. Proposed changes included the following key requests:

- Each new RTO will have a lower heat input capacity (24.8 MMBtu/hr) than the existing RTO (32 MMBtu/hr). Facility-wide potential emissions have been updated.
- Update the facility-wide pellet production from 826,733 tpy of wood pellets per year to 920,000 ODT of pellets per year utilizing up to 95% softwood feedstock. This new throughput also applies to dry hammermills (HML), pellet mills (PML), and pellet coolers (PCL).
- Update the maximum hourly throughput for both Rotary Dryers (DRY1 and DRY2) to 52.5 ODT/hr. The annual throughput for each dryer will remain unchanged at 390,000 ODT/yr.
- Update potential emissions to include particulate matter (PM), volatile organic compounds (VOC), and HAP for bark hog (BH01), chipper and re-chippers (LC02 and LC03), and green chip storage silos (GCS1 and GCS2). These emissions were not previously quantified.
- Update PM emissions for other fugitive and non-fugitive sources.
- Remove the wet electrostatic precipitator (WESP) control efficiency applied for metal HAPs; update the WESP hydrochloric acid control efficiency to 90%; and update potential metal HAP emissions based on emission factors for wood-fired rotary dryers from the NCASI Wood Products Database.
- Update facility-wide potential emissions to include idle and cold startup emissions for the heat energy systems (HES1 and HES2).
- Remove fine storage silo (SS) from facility-wide potential emissions as this source does not exist.
- Emission factors for the emergency engines were also updated.

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- Update potential emissions for RTO1, RTO2, RCO1, and RCO2 based on process information and recent engineering reviews. This would result in modifying the VOC emission factors in Condition 6.2.2.
- Switch the startup fuel from natural gas to manual application of distillate fuel oil as an accelerant for the Heat Energy Systems (ID Nos. HES1 and HES2).

PART 2.0 REQUIREMENTS PERTAINING TO THE ENTIRE FACILITY

2.1 Facility Wide Emission Caps and Operating Limits

2.1.2 [Deleted]

PART 3.0 REQUIREMENTS FOR EMISSION UNITS

Note: Except where an applicable requirement specifically states otherwise, the averaging times of any of the Emissions Limitations or Standards included in this permit are tied to or based on the run time(s) specified for the applicable reference test method(s) or procedures required for demonstrating compliance.

3.1.1 Additional and Affected Emission Units

Emission Units		Specific Limitations/Requirements	Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	ID No.	Description
LC01	Wood chip Screen	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	CYC1	Cyclone
LD01	Log Debarking	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	---	---
BH01	Bark Hog	40 CFR 63 Subpart A 40 CFR 63 Subpart B 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	---	---
LC02	Chipper	40 CFR 63 Subpart A 40 CFR 63 Subpart B 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	---	---
LC03	Re-chippers (2)	40 CFR 63 Subpart A 40 CFR 63 Subpart B 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	---	---
GCS1	Green Chip Storage Silo 1	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	---	---
GCS2	Green Chip Storage Silo 2	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	---	---
HES1	193 MMBtu/hr Heat Energy System 1	40 CFR 60 Subparts A & Db 40 CFR 63 Subparts A and DDDDD 391-3-1-.02(2)(d)	WE01 RTO1	Wet ESP Regenerative Thermal Oxidizer
HES2	193 MMBtu/hr Heat Energy System 2		WE02 RTO2	Wet ESP Regenerative Thermal Oxidizer
DRY1	Rotary Drum Dryer 1	40 CFR 63 Subpart A 40 CFR 63 Subpart B 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	WE01 RTO1	Wet ESP Regenerative Thermal Oxidizer
DRY2	Rotary Drum Dryer 2		WE02 RTO2	Wet ESP Regenerative Thermal Oxidizer
DCS	Dry Chip Storage Silo	40 CFR 63 Subpart A 40 CFR 63 Subpart B 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	DCS1 RC01	Baghouse Regenerative Catalytic Oxidizer (West)
CE01	Conveying Equipment Aspiration System for Hammermill Lines	40 CFR 63 Subpart A 40 CFR 63 Subpart B 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	CBH1 RCO1	Baghouse Regenerative Catalytic Oxidizer (West)
HML	Hammermill Lines (10 Hammermills)	40 CFR 63 Subpart A 40 CFR 63 Subpart B 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	HBH1 to HBH10 RCO1	10 Baghouses Regenerative Catalytic Oxidizer (West)
FS	Fiber Storage Silo	40 CFR 63 Subpart A 40 CFR 63 Subpart B 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	CBH2 RCO2	Baghouse Regenerative Catalytic Oxidizer (East)

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Emission Units		Specific Limitations/Requirements	Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	ID No.	Description
CE02	Conveying Equipment Aspiration System for Pellet mill/Pellet Cooler Lines	40 CFR 63 Subpart A 40 CFR 63 Subpart B 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	CBH2	Baghouse
			RCO2	Regenerative Catalytic Oxidizer (East)
PML PCL	Pellet mill (5 Lines) Pellet Cooler (5 lines)	40 CFR 63 Subpart A 40 CFR 63 Subpart B 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	PBH1 to PBH5 RCO2	Baghouses Regenerative Catalytic Oxidizer (East)
PA01	Pelletizing Area Vacuum System	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	PAB1	Baghouse
RL	Railcar Loadouts (3)	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	RCF1 to RCF3	Compact Filters
FP01	175 hp Fire Water Pump Engine – diesel fired	40 CFR 60 Subparts A and IIII 40 CFR 63 Subparts A and ZZZZ 391-3-1-.02(2)(b) 391-3-1-.02(2)(g)	N/A	N/A
EG01	500 kW Diesel fired Emergency Generator - Dryers	40 CFR 60 Subparts A and IIII 40 CFR 63 Subparts A and ZZZZ 391-3-1-.02(2)(b) 391-3-1-.02(2)(g)	N/A	N/A
EG02	250 kW Diesel fired Emergency Generator - Pelletizing	40 CFR 60 Subparts A and IIII 40 CFR 63 Subparts A and ZZZZ 391-3-1-.02(2)(b) 391-3-1-.02(2)(g)	N/A	N/A

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards are intended as a compliance tool and may not be definitive.

3.2 Equipment Emission Caps and Operating Limits

Modified Conditions

- 3.2.1 **The Permittee shall operate all control devices for particulate matter (such as wet ESPs, baghouses, and filters) at all times when the associated emission units are in operation.**
[Avoidance of 40 CFR 52.21 – PM]
- 3.2.2 The Permittee shall operate and maintain the Wet ESP (ID Nos. WE01 and WE02) and the Regenerative Thermal Oxidizers (ID Nos. RTO1 and RTO2) during all periods in which the respective Heat Energy Systems (ID Nos. HES1 and HES2) and Dryers (ID Nos. DRY1 and DRY2) are in operation, except during idle, cold startup, and malfunctions. **The destruction/removal efficiency (DRE) of the RTO for removing Total HAPs, measured as VOCs, from HES1/HES2/DRY1/DRY2 shall be at least 95%.**
[391-3-1-.03(2)(c) and 40 CFR 63.42(c)(2) – Case by Case MACT]
- 3.2.3 The Permittee shall operate RTO1 and RTO2, each, with the combustion zone temperature at or above the minimum temperature set point established during the most recent VOC performance test.
[391-3-1-.03(2)(c) and 40 CFR 63.42(c)(2) – Case by Case MACT]
- 3.2.4 The Permittee shall operate and maintain the Regenerative Catalytic Oxidizers (ID Nos. RCO1 and RCO2) during all periods in which the Hammermill Lines (ID No. HML), Pellet Mill (ID No. PML), Pellet Cooler (ID No. PCL), conveying equipment aspiration systems

(ID Nos. CE01 and CE02), and silos (ID Nos. DCS and FS) are in operation. **The destruction/removal efficiency (DRE) of the RCO for removing Total HAPs, measured as VOCs, from HML/PML/PCL/CE01/CE02/DCS/FS shall be at least 95%.**

[391-3-1-.03(2)(c) and 40 CFR 63.42(c)(2) – Case by Case MACT]

- 3.2.5 The Permittee shall operate RCO1 and RCO2, each, with the combustion zone temperature at or above the minimum temperature set point established during the most recent VOC performance test.

[391-3-1-.03(2)(c) and 40 CFR 63.42(c)(2) – Case by Case MACT]

New Conditions

- 3.2.6 Upon the initial startup of the new regenerative thermal oxidizers (ID Nos. RTO1 and RTO2), the Permittee shall maintain the combustion zone temperature of each RTO at 1,500 degrees Fahrenheit (1,500°F) until the VOC performance test required by Condition 4.2.17 is completed.

After the performance test, the Permittee shall operate each RTO with the combustion zone temperature at or above the minimum temperature set point established during the most recent VOC performance test. Condition 3.2.3 shall be null and void after the initial startup of new RTO1 and RTO2.

[391-3-1-.03(2)(c) and 40 CFR 63.42(c)(2) – Case by Case MACT]

- 3.2.7 The Permittee shall not produce more than 920,000 oven dried tons (ODT) of pellets from the entire facility during any twelve consecutive months.

[GA Air Toxics Guidelines]

3.3 Equipment Federal Rule Standards

Modified Conditions

- 3.3.4 The Permittee shall comply with all applicable provisions of the “National Emission Standards for Hazardous Air Pollutants” as found in 40 CFR 63 Subpart A, “General Provisions” and 40 CFR 63 Subpart JJJJJ, “National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial Commercial, and Institutional Boilers” for the operation of Heat Energy Systems (HES1 and HES2), including the following requirements: [40 CFR 63 Subpart A and Subpart JJJJJ and 40 CFR 63.11193]

- a. Conduct biennial performance tune-ups on Heat Energy Systems (HES1 and HES2) as required by 40 CFR 63.11223. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up for the purpose of demonstrating continuous compliance with the Boiler MACT requirements. The tune-up must be conducted as specified in Condition 5.2.13.

[40 CFR 63.11196(a)(1), 63.11214(b), 40 CFR 63.11223(a) and 40 CFR 63.11223(b)]

This Condition shall be null and void on the 3rd anniversary of the issuance date of this Permit Amendment.

- 3.3.5 At all times, the Permittee shall operate and maintain the Heat Energy Systems (HES1 and HES2) and associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

[40 CFR 63.11205(a)]

This Condition shall be null and void on the 3rd anniversary of the issuance date of this Permit Amendment.

- 3.3.6 The Permittee shall not cause, let, suffer, permit, or allow the emission of filterable + condensable Total Particulate Matter (TPM) from the Heat Energy Systems (ID Nos. HES1 and HES2) in amounts equal to or exceeding 0.03 pounds per million Btu heat input, except during periods of startup, shutdown, or malfunction.

[**40 CFR 60.43b(g)**, 40 CFR 60.43b(h)(1), **40 CFR 60.46b(a)**, and 391-3-1-.02(2)(d)2. (subsumed)]

- 3.3.7 The Permittee shall limit the fuel fired in the Heat Energy Systems (ID Nos. HES1 and HES2) to biomass only except during startup when **distillate fuel oil** is used as an accelerant, in order to avoid having to calculate the annual capacity factor for the fuel fired in these sources.

[40 CFR 60.49b(d)(2)]

- 3.3.8 The Permittee shall not discharge, or cause the discharge, into the atmosphere from the Heat Energy Systems (ID Nos. HES1 and HES2), gases which exhibit opacity equal to or greater than 20 percent except for one six-minute period of not more than 27 percent opacity except during periods of startup, shutdown, and malfunction.

[**40 CFR 60.43b(f)**, 40 CFR 60.43b(g), **40 CFR 60.46b(a)** and 391-3-1-.02(2)(d)3. (subsumed)]

New Conditions – 40 CFR 63 Subpart DDDDD

- 3.3.9 Within 3 years after the issuance of this Permit Amendment, the Permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP) as found in 40 CFR 63 Subpart A – “General Provisions,” and Subpart DDDDD – “National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters,” for operation of the Heat Energy Systems (ID Nos. HES1 and HES2).

[40 CFR 63 Subpart A and Subpart DDDDD and 40 CFR 63.7495(c)(2)]

- 3.3.10 Within 3 years after the issuance of this Permit Amendment, the Permittee shall not cause, let, suffer, permit or allow emissions from the Heat Energy Systems (ID Nos. HES1 and HES2, via Wet ESP WE01/WE02 and Regenerative Thermal Oxidizers RTO1 and RTO2) that contain the following, except during startup and shutdown. During periods of startup and shutdown, the Permittee shall comply with the requirements specified in Conditions 3.3.11 and 3.3.12.

[40 CFR 63.7500(a)(1); 40 CFR 63.7500(f); 40 CFR 63.7505(a); Item 1. and Item 7. of Table 2 to 40 CFR 63 Subpart DDDDD]

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- a. Hydrogen chloride (HCl) in excess of 2.0×10^{-2} pound per MMBtu of heat input (lb/MMBtu).
 - b. Mercury (Hg) in excess of 5.4×10^{-6} lb/MMBtu of heat input.
 - c. Carbon monoxide (CO) in excess of 1,100 ppmvd at 3% oxygen.
 - d. Filterable particulate matter (PM) in excess of 3.4×10^{-2} lb/MMBtu of heat input (or total selected metals (TSM) in excess of 2.0×10^{-4} lb/MMBtu of heat input).
- 3.3.11 Within 3 years after the issuance of this Permit Amendment, and during the startup of the Heat Energy Systems (ID Nos. HES1 and HES2):
[40 CFR 63.7500(a)(1); 40 CFR 63.7530(h); 40 CFR 63.7540(d); and Item 5. of Table 3 to 40 CFR 63 Subpart DDDDD]
- a. The Permittee shall operate all continuous monitoring systems (CMS) during startup.
 - b. For startup of a boiler, the Permittee shall use one or a combination of the following clean fuels: Natural gas, synthetic natural gas, propane, other Gas 1 fuels, distillate oil, syngas, ultra-low sulfur diesel, fuel oil-soaked rags, kerosene, hydrogen, paper, cardboard, refinery gas, liquefied petroleum gas, clean dry biomass, and any fuels meeting the appropriate HCl, mercury and TSM emission standards by fuel analysis.
 - c. The Permittee have the option of complying using either of the following work practice standards.
 - i. If the Permittee chooses to comply using definition (1) of “startup” in 40 CFR 63.7575, once the Permittee starts firing fuels that are not clean fuels, the Permittee shall vent emissions to the main stack(s) and engage all of the applicable control devices. Startup ends when steam or heat is supplied for any purpose.
 - ii. If the Permittee chooses to comply using definition (2) of “startup” in 40 CFR 63.7575, once the Permittee starts to feed fuels that are not clean fuels, the Permittee shall vent emissions to the main stack(s) and engage all of the applicable control devices so as to comply with the emission limits within 4 hours of start of supplying useful thermal energy. The Permittee shall engage and operate PM control within one hour of first feeding fuels that are not clean fuels. The Permittee shall start all applicable control devices as expeditiously as possible, but, in any case, when necessary to comply with other standards applicable to the source by a permit limit or a rule other than 40 CFR 63 Subpart DDDDD that require operation of the control devices. The Permittee shall develop and implement a written startup and shutdown plan, as specified in Condition 6.2.13.
 - d. The Permittee shall comply with all applicable emission limits at all times except during startup and shutdown periods at which time the Permittee must meet the work practice standards in Conditions 3.3.11 and 3.3.12. The Permittee shall collect monitoring data

during periods of startup, as specified in Condition 5.2.23b. The Permittee shall keep records during periods of startup. The Permittee shall provide reports concerning activities and periods of startup, as specified in Conditions 6.2.15.

- 3.3.12 Within 3 years after the issuance of this Permit Amendment, and during shutdown of the Heat Energy Systems (ID Nos. HES1 and HES2), the Permittee shall:
[40 CFR 63.7500(a)(1); 40 CFR 63.7530(h); 40 CFR 63.7540(d); and Item 6. of Table 3 to 40 CFR 63 Subpart DDDDD]
 - a. The Permittee shall operate all CMS during shutdown.
 - b. While firing fuels that are not clean fuels (e.g., painted/pigment-stained/pressure treated wood) during shutdown, the Permittee shall vent emissions to the main stack(s) and operate all applicable control devices, in any case, when necessary to comply with other standards applicable to the boiler that require operation of the control device.
 - c. If, in addition to the fuel used prior to initiation of shutdown, another fuel must be used to support the shutdown process, that additional fuel must be one or a combination of the following clean fuels: Natural gas, synthetic natural gas, propane, other Gas 1 fuels, distillate oil, syngas, ultra-low sulfur diesel, refinery gas, and liquefied petroleum gas.
 - d. The Permittee shall comply with all applicable emissions limits at all times except for startup or shutdown periods conforming with this work practice. The Permittee shall collect monitoring data during periods of shutdown, as specified in Condition 5.2.23b. The Permittee shall keep records during periods of shutdown. The Permittee shall provide reports concerning activities and periods of shutdown, as specified in Conditions 6.2.15.
- 3.3.13 Within 3 years after the issuance of this Permit Amendment, the Permittee shall maintain the 30-day rolling average operating load of the Heat Energy Systems (ID Nos. HES1 and HES2) such that it does not exceed 110 percent of the highest hourly average operating load recorded during the most recent performance test determined in accordance with Condition 4.2.13b.iii. Prior to the completion of the initial performance test specified in Condition 4.2.6, each heat energy system shall not be operated with more than 212 MMBtu/hr.
[40 CFR 63.7500(a)(2); Item 7. of Table 4 to 40 CFR 63 Subpart DDDDD; and Item 10.c. of Table 8 to 40 CFR 63 Subpart DDDDD]
- 3.3.14 Within 3 years after the issuance of this Permit Amendment, the Permittee shall install, operate, and maintain an oxygen analyzer system on each of the Heat Energy Systems (ID Nos. HES1 and HES2) via the RTO exhaust stacks, and maintain the 30-day rolling average oxygen content at or above the lowest hourly average oxygen concentration measured during the CO performance tests. Prior to the completion of the initial performance test specified in Condition 4.2.6, the Permittee shall operate each heat energy system at or above the manufacturer recommended lowest oxygen concentration level.
[40 CFR 63.7500(a)(2); 40 CFR 63.7525(a); Item 8. of Table 4 to 40 CFR 63 Subpart DDDDD; and Item 9.c. of Table 8 to 40 CFR 63 Subpart DDDDD]

- 3.3.15 Within 3 years after the issuance of this Permit Amendment, the Permittee shall, at all times, operate and maintain the Heat Energy Systems (ID Nos. HES1 and HES2), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Division that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the boiler.
[40 CFR 63.7500(a)(3)]

3.4 Equipment SIP Rule Standards

- 3.4.2 The Permittee shall not cause, let, suffer, permit, or allow the emission from any manufacturing process that is subject to GA Rule (e), particulate matter (PM) in total quantities equal to or exceeding the allowable rate as calculated using the applicable equation below, unless otherwise specified in this Permit.
[391-3-1-.02(2)(e)1.(i)]

- a. $E = 4.1 * P^{0.67}$; for process input weight rate up to and including 30 tons per hour.
- b. $E = 55 * P^{0.11} - 40$; for process input weight rate above 30 tons per hour.

Where: E = allowable emission rate in pounds per hour;
P = process input weight rate in tons per hour.

PART 4.0 REQUIREMENTS FOR TESTING**4.1 General Testing Requirements**Modified Conditions

- 4.1.1 The Permittee shall cause to be conducted a performance test at any specified emission unit when so directed by the Environmental Protection Division (“Division”). The test results shall be submitted to the Division within 60 days of the completion of the testing. Any tests shall be performed and conducted using methods and procedures that have been previously specified or approved by the Division.
[391-3-1-.02(6)(b)1(i) **and 40 CFR 63.7515(f)**]
- 4.1.2 The Permittee shall provide the Division thirty (30) days (or sixty (60) days for tests required by 40 CFR Part 63) prior written notice of the date of any performance test(s) to afford the Division the opportunity to witness and/or audit the test and shall provide with the notification a test plan in accordance with Division guidelines.
[391-3-1-.02(3)(a); 40 CFR 63.7(b)(1); **40 CFR 63.7(c), 40 CFR 63.7520(a) and 40 CFR 63.7545(d)**]
- 4.1.3 Performance and compliance tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division’s Procedures for Testing and Monitoring Sources of Air Pollutants. The methods for the determination of compliance with emission limits listed under Sections 3.2, 3.3, 3.4 and 3.5 are as follows:
- a. Method 1 shall be used for the determination of sample point locations.
 - b. Method 2, **2F (3-D Probe), or 2G (2-D Probe)** shall be used for the determination of stack gas velocity and flow rate.
[Items 1. through 4. of Table 5 to 40 CFR 63 Subpart DDDDD]
 - c. Method 3 or 3A shall be used for the determination of stack gas molecular weight. Method 3A or 3B shall also be used for the determination of oxygen or carbon dioxide concentration of the stack gas. ASTM D6522-00 is also approved to be used for the determination of oxygen concentration of the stack gas for the 40 CFR 63 Subpart DDDDD CO limit.
[Items 1. through 5. of Table 5 to 40 CFR 63 Subpart DDDDD]
 - d. Method 4 shall be used for the determination of stack gas moisture.
[Items 1. through 5. of Table 5 to 40 CFR 63 Subpart DDDDD]
 - e. Method 5 in conjunction with Method 202 shall be used to demonstrate compliance with the Particulate Matter emission limit in Condition 3.3.6.
 - f. Method 5 for the determination of Particulate Matter emissions to demonstrate compliance with the Particulate Matter emission limit in Condition 3.3.10d. The probe and filter temperature should be 320 + or – 25°F and minimum sample volumes must be 60 dscf.

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- g. Method 7E shall be used for the determination of NO_x concentrations.
- h. Method 9 and the procedures in Section 1.3 of the above referenced document shall be used to determine the opacity.
- i. Method 10 with a measurement span value of 2 times the concentration of the 40 CFR 63 Subpart CO emission limit, shall be used for the determination of CO emission concentration.
[Item 5. of Table 5 to 40 CFR 63 Subpart DDDDD]
- j. Method 19 shall be used when applicable; to convert total particulate matter or TSM, CO, NO_x, sulfur dioxide, HCl, and Hg concentrations (i.e., grains/dscf for PM, ppm for gaseous pollutants), as determined using other methods specified in this section, to mass emission rates (i.e., lb/MMBtu, lb/hr).
[Items 1. through 4. of Table 5 to 40 CFR 63 Subpart DDDDD]
- k. EPA OTM-26 (Interim VOC Measurement Protocol for the Wood Products Industry – July 2007) or “WPP1 VOC” (Wood Products Protocol 1 VOC) shall be used for the determination of VOC concentrations.
 - i. Method 25A shall be used for determination of VOC concentrations.
 - ii. NCASI 99.02, Method 308, or Method 320 shall be used for the determination of methanol concentrations.
 - iii. NCASI 99.02 or 105.01 or Method 316 or NCASI 98.01 or Method 320 shall be used for the determination of formaldehyde concentrations.
 - iv. NCASI 99.02 or SW 846 Method 0011 or Method 320 shall be used for the determination of acetaldehyde concentrations.
- l. Method 0011 from “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” EPA publication SW-846 shall be used to determine the formaldehyde concentration. The sampling time for each run shall be one hour. [EPA Method 0011 (sampling) and EPA Method 0011A (analysis) may be used for the determination of formaldehyde concentration [40 CFR 266, Appendix IX]. Alternatively, Method 316 or 320 in Appendix A to 40 CFR Part 63; OR NCASI Method CI/WP-98.01 OR NCASI Method IM/CAN/WP-99.02 OR NCASI Method ISS/FP-A105.01 may be used.
- m. Method 320 in Appendix A to 40 CFR Part 63; OR the NCASI Method IM/CAN/WP-99.01 (incorporated by reference, see § 63.14(f)) shall be used for determination of total Hazardous Air Pollutants (HAP).
- n. Method 26 or 26A shall be used for the determination of HCl emission concentration.
[Item 3. of Table 5 to 40 CFR 63 Subpart DDDDD]

- o. Method 29, 30A, or 30B shall be used for the determination of Hg emission concentration.
[Item 4. of Table 5 to 40 CFR 63 Subpart DDDDD]

Minor changes in methodology may be specified or approved by the Director or his designee when necessitated by process variables, changes in facility design, or improvement or corrections that, in his opinion, render those methods or procedures, or portions thereof, more reliable.
[391-3-1-.02(3)(a)]

4.2 Specific Testing Requirements

Modified Conditions

4.2.1 [Deleted]

- 4.2.2 **Within 180 days after the initial startup of new RTO1 and RTO2, the Permittee shall conduct the initial NO_x and CO tests on each RTO exhaust stack, at the maximum anticipated drying rate.** The Permittee shall thereafter repeat the NO_x and CO performance tests on each RTO exhaust stack at 36-month intervals. If the results of either the NO_x or CO test exceed the factor currently being used in Condition 6.2.1, then the Permittee must immediately reestablish the factors using the method described in Condition 6.2.1 (using the new, higher emission factors starting on the test date). The Permittee shall submit a permit application within 180 days after testing, either requesting the higher emission factor or demonstrating that the emission factor derived is not representative of normal emissions. The performance test must be conducted simultaneously each time a test is required for one of these pollutants.
[391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)(i)]

- 4.2.3 **Within 180 days after the initial startup of new RTO1 and RTO2, the Permittee shall conduct the initial VOC performance test, on each RTO exhaust stack, and initial Total HAP (measured as VOCs) performance tests, on each RTO inlet and outlet (exhaust stack), using EPA OTM-26 test method at the maximum anticipated production rate, in order to demonstrate compliance with the VOC emission limit in Condition 2.1.1 and 95-percent Total HAP (measured as VOCs) reduction limit in Condition 3.2.2. The Permittee shall thereafter repeat the VOC (stack) and Total HAP (inlet and stack, measured as VOCs) performance tests on each RTO at 36-month intervals.**

During the performance tests the Permittee shall continuously measure and record the combustion zone temperature for each RTO. These measurements shall be used to establish the minimum temperature at which each RTO must operate so that compliance with Conditions 2.1.1 and 3.2.2 can be assured. During the performance testing, the Permittee shall record the amount of product dried (in both actual and oven dry tonnages) in the dryers (ID Nos. DRY1 and DRY2). If the results of any VOC tests exceed the associated emission factor currently being used in Condition 6.2.2, then the Permittee must immediately reestablish the factors using the method described in Condition 6.2.2 (using the new, higher emission factors starting on the test date). The Permittee shall submit

a permit application within 180 days after testing, either requesting the higher emission factor or demonstrating that the emission factor derived is not representative of normal emissions.
[391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)(i)]

- 4.2.4 **Within 180 days after the issuance of this permit amendment, the Permittee shall conduct the initial VOC performance tests on each RCO (ID No. RCO1 and RCO2) exhaust stack, and initial Total HAP (measured as VOCs) performance tests, on each RCO inlet and outlet (exhaust stack), using EPA OTM-26 test method at the maximum anticipated production rate, in order to demonstrate compliance with the VOC emission limit in Condition 2.1.1 and 95-percent Total HAP (measured as VOCs) reduction limit in Condition 3.2.4. The Permittee shall thereafter repeat the VOC (stack) and Total HAP (inlet and stack, measured as VOCs) performance tests on each RCO at 36-month intervals.**

**During the performance tests the Permittee shall continuously measure and record the combustion zone temperatures for each RCO. These measurements shall be used to establish the minimum temperature at which each RCO must operate so that compliance with Conditions 2.1.1 and 3.2.4 can be assured. During the performance testing, the Permittee shall record the amount of material processed by the pellet mill (PML) or dry hammermill (HML) (in both actual and oven dry tonnages). If the results of any VOC tests exceed the associated emission factor currently being used in Condition 6.2.2, then the Permittee must immediately reestablish the factors using the method described in Condition 6.2.2 (using the new, higher emission factors starting on the test date). The Permittee shall submit a permit application within 180 days after testing, either requesting the higher emission factor or demonstrating that the emission factor derived is not representative of normal emissions.
[391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)(i)]**

- 4.2.5 During the performance tests specified in Conditions 4.2.1, 4.2.3 and 4.2.4, the Permittee shall, using the monitoring systems required by Condition 5.2.2, verify the control device is operating within the appropriate operating limits for the following control device parameters:
[391-3-1-.02(6)(b)1(i)]
- a. the total secondary power of each wet ESP calculated from the secondary voltage and secondary current.
 - b. the minimum combustion temperature of the RTOs and RCOs.

New Conditions – 40 CFR 63 Subpart DDDDD

- 4.2.6 Within 3 years and 180 days after the issuance of this Permit Amendment, the Permittee shall conduct the following performance tests on each Heat Energy System (ID Nos. HES1 and HES2) to demonstrate compliance with the emission limits specified in Conditions 3.3.10a. through d.:
[391-3-1-.02(6)(b)1; 40 CFR 63.7505(c); 40 CFR 63.7510(a)(1); 40 CFR 63.7510(e); 40 CFR 63.7520(a); Items 1 and 7 of Table 2 to 40 CFR 63 Subpart DDDDD; and 40 CFR 70.6(a)(3)(i)]
- a. A performance test for HCl. Samples must be collected at a minimum of 1 dry standard cubic meter (dscm) per run for Method 26A or at a minimum of 120 liters per run for Method 26.
 - b. A performance test for Hg. Samples must be collected at a minimum of 3 dscm per run for Method 29; at a minimum sample as specified in Method 30A or Method 30B; or at a minimum of 3 dscm for Method ASTM D6784.
 - c. A performance test for CO. Samples must be collected at a minimum of 1 hour sampling time per run.
 - d. A performance test for filterable PM (or TSM). Samples must be collected at a minimum of 2 dscm per run.
- 4.2.7 In lieu of the performance testing requirements specified in Condition 4.2.6, the Permittee may elect to demonstrate compliance with the HCl, Hg, or TSM emission standards specified in Conditions 3.3.10a., b., and d. through fuel analyses. The fuel analyses must be conducted for the wood burned in HES1 and HES2 according to the requirements specified in Condition 4.2.12 and Table 6 to 40 CFR 63 Subpart DDDDD. No fuel analyses are required for the distillate fuel oil that is only used during the startup of HES1 and HES2.
[391-3-1-.02(6)(b)1; 40 CFR 63.7505(c); 40 CFR 63.7510(a)(2)(i); 40 CFR 63.7510(b); 40 CFR 63.7521(a); and 40 CFR 70.6(a)(3)(i)]
- 4.2.8 The Permittee shall repeat the performance tests specified in Condition 4.2.6 according to the following schedule. This Condition only applies to CO performance testing and any other performance testing if the facility chooses to comply with any of the HCl, Hg, or TSM emissions limits (in Conditions 3.3.10a., b., and d.) through performance testing.
[391-3-1-.02(6)(b)1; 40 CFR 63.7505(c); 40 CFR 63.7515(a) through (c); 40 CFR 63.7520(a); and 40 CFR 70.6(a)(3)(i)]
- a. Subsequent performance test must be conducted on an annual basis, except as specified in Paragraphs b. and c. of this Condition. Annual performance tests must be completed no more than 13 months after the previous performance test.
 - b. If the performance tests for a given pollutant for at least 2 consecutive years are at or below 75 percent of the emission limit for the pollutant, and if there are no changes in the operation of the associated boiler or air pollution control equipment that could increase emissions, the Permittee may choose to conduct performance tests for the

pollutant every third year. Each such performance test must be conducted no more than 37 months after the previous performance test. The requirement to test at maximum chloride input level is waived unless the stack test is conducted for HCl. The requirement to test at maximum mercury input level is waived unless the stack test is conducted for mercury. The requirement to test at maximum TSM input level is waived unless the stack test is conducted for TSM.

- c. If a performance test shows emissions exceeded the emission limit or 75 percent of the emission limit for a pollutant, the Permittee shall conduct annual performance tests for that pollutant until all performance tests over a consecutive 2-year period meet the required level (at or below 75 percent of the emission limit).
- d. If any of HES1 and HES2 has not operated since the previous performance testing, and more than 1 year has passed since the last performance testing, the Permittee shall complete the subsequent performance testing within 180 days after the re-start of the heat energy system.
[40 CFR 63.7515(g)]

4.2.9 If the Permittee chooses fuel analyses to demonstrate compliance with any of the HCl, Hg, or TSM emissions limits in Conditions 3.3.10a., b., and d., the Permittee shall repeat the fuel analyses specified in Condition 4.2.7 according to the following schedule. Data shall be recorded in accordance with Item 8. of Table 8 to 40 CFR 63 Subpart DDDDD.
[391-3-1-.02(6)(b)1; 40 CFR 63.7505(c); 40 CFR 63.7515(e); Item 8. of Table 8 to 40 CFR 63 Subpart DDDDD; and 40 CFR 70.6(a)(3)(i)]

- a. Subsequent fuel analyses must be conducted on a monthly basis, except as specified in Paragraphs b. and c. of this Condition, according to the requirements specified in Condition 4.2.12. Subsequent monthly fuel analyses may be conducted any time within the calendar month as long as the analysis is separated from the previous analysis by at least 14 calendar days.
- b. If each of any 12 consecutive monthly fuel analyses demonstrates 75 percent or less of the associated emission standard(s), the Permittee may decrease the fuel analysis frequency to quarterly for that fuel.
- c. If any quarterly sample exceeds 75 percent of the associated emission standard(s) or the Permittee begins burning a new type of fuel, the Permittee shall return to monthly monitoring for that fuel, until 12 months of fuel analyses are again less than 75 percent of the associated emission standard(s).
- d. If a new type of fuel is to be burned in HES1 or HES2, a fuel analysis for the new fuel must be conducted before burning the new fuel.
- e. If any of HES1 and HES2 has not operated since the previous fuel analysis, and more than 1 year has passed since the last fuel analysis, the Permittee shall complete the subsequent fuel analysis within 180 days after the re-start of the heat energy system.
[40 CFR 63.7515(g)]

- 4.2.10 The Permittee shall follow the following procedures for conducting the performance tests required by Conditions 4.2.6 and 4.2.8:
[391-3-1-.02(6)(b)1; 40 CFR 7510(a)(1), (c), and (d); 40 CFR 63.7520; and 40 CFR 70.6(a)(3)(i)]
- a. The Permittee shall conduct all performance tests according to 40 CFR 63.7(c), (d), (f), and (h). The Permittee shall also develop a site-specific stack test plan according to the requirements in 40 CFR 63.7(c). The Permittee shall conduct all performance tests under such conditions as the Division specifies to the Permittee based on the representative performance of the boiler for the period being tested. Upon request, the Permittee shall make available to the Division such records as may be necessary to determine the conditions of the performance tests.
 - b. The Permittee shall conduct each performance test according to the requirements in Table 5 to 40 CFR 63 Subpart DDDDD, which are incorporated into Condition 4.1.3.
 - c. The Permittee shall conduct each performance test under the specific conditions listed in Tables 5 and 7 to 40 CFR 63 Subpart DDDDD. The Permittee shall conduct performance tests at representative operating load conditions while burning the type of fuel or mixture of fuels that has the highest content of chlorine and mercury, and TSM if the Permittee opts to comply with the TSM alternative standard and the Permittee shall demonstrate initial compliance and establish the operating limits based on these performance tests. These requirements could result in the need to conduct more than one performance test. Following each performance test and until the next performance test, the Permittee shall comply with the operating limit for operating load conditions established in accordance with Condition 4.2.13b.
 - d. The Permittee shall conduct a minimum of three separate test runs for each performance test, as specified in 40 CFR 63.7(e)(3). Each test run must comply with the minimum applicable sampling times or volumes specified in Conditions 4.2.6a. through d.
 - e. To determine compliance with the emission limits, the Permittee shall use the F-Factor methodology and equations in sections 12.2 and 12.3 of EPA Method 19 at 40 CFR 60, appendix A-7 of this chapter to convert the measured PM, HCl, Hg, and TSM concentrations that result from the performance test to pounds per million Btu heat input emission rates.
 - f. If measurement results for any pollutant are reported as below the method detection level (e.g., laboratory analytical results for one or more sample components are below the method defined analytical detection level), the Permittee shall use the method detection level as the measured emissions level for that pollutant in calculating compliance. The measured result for a multiple component analysis (e.g., analytical values for multiple Method 29 fractions both for individual HAP metals and for total HAP metals) may include a combination of method detection level data and analytical data reported above the method detection level.

- 4.2.11 The Permittee shall repeat the performance tests specified in Condition 4.2.6 to demonstrate compliance with the emission limits specified in Conditions 3.3.10a., b., or d. if the fuel for the Heat Energy System (ID Nos. HES1 and HES2) is changed/switched. The Permittee is exempt from the associated testing requirements for fuel switch if the Permittee is able to show that the new fuel(s) does (do) not increase the chlorine, mercury, or TSM (if alternative TSM limits in Conditions 3.3.10d. are opted) input into the unit through the results of fuel analysis, conducted in accordance with Condition 4.2.12 and 40 CFR 63.7540(a)(4) and (a)(6).
[391-3-1-.02(6)(b)1; 40 CFR 63.7530(b); and 40 CFR 70.6(a)(3)(i)]
- 4.2.12 The Permittee shall comply the following procedures and procedures specified in 40 CFR 63.7530(c) for conducting the fuel analyses required in Conditions 4.2.7 and 4.2.9:
[391-3-1-.02(6)(b)1; 40 CFR 7510(a)(2) and (b); 40 CFR 63.7521; 40 CFR 63.7530(c); and 40 CFR 70.6(a)(3)(i)]
- a. The Permittee shall conduct all fuel analyses according to Paragraphs b. and c. of This Condition and Table 6 to 40 CFR 63 Subpart DDDDD.
 - b. The Permittee shall develop a site-specific fuel monitoring plan according to the following requirements.
 - i. If the Permittee intends to use an alternative analytical method other than those required by Table 6 to 40 CFR 63 Subpart DDDDD, the Permittee shall submit the fuel analysis plan to the Division for review and approval no later than 60 days before the intended initial compliance demonstration date.
 - ii. The Permittee shall include the following information in the fuel analysis plan.
 - A. The identification of all fuel types anticipated to be burned in each of HES1 and HES2.
 - B. For each anticipated fuel type, the notification of whether the Permittee or a fuel supplier will be conducting the fuel analysis.
 - C. For each anticipated fuel type, the analytical methods from Table 6 to 40 CFR 63 Subpart DDDDD, with the expected minimum detection levels, to be used for the measurement of chlorine or mercury.
 - D. If the Permittee requests to use an alternative analytical method other than those required by Table 6 to 40 CFR 63 Subpart DDDDD, the Permittee shall also include a detailed description of the methods and procedures that will be used. Methods in Table 6 to 40 CFR 63 Subpart DDDDD shall be used until the requested alternative is approved.
 - E. If the Permittee uses fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 to 40 CFR 63 Subpart DDDDD.

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- c. The Permittee shall determine the concentration of pollutants in the fuel (mercury and/or chlorine and/or TSM) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 to 40 CFR 63 Subpart DDDDD, for use in Equations 7, 8, and 9 of 40 CFR 63 Subpart DDDDD.
- 4.2.13. During the most recent performance tests required in Conditions 4.2.6 and 4.2.8 and the most recent fuel analyses required in Conditions 4.2.7 and 4.2.9, the Permittee shall establish the following limits for the Heat Energy System (ID Nos. HES1 and HES2) according to the following procedures and 40 CFR 63.7530.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- a. A unit-specific limit for minimum oxygen level (operating limit).
[40 CFR 63.7510(a)(3); 40 CFR 63.7525(a); 40 CFR 63.7530(a) and (b); Item 8. of Table 4 to 40 CFR 63 Subpart DDDDD; and Item 4. of Table 7 to 40 CFR 63 Subpart DDDDD]
 - i. The Permittee shall collect oxygen data every 15 minutes during the entire period of the performance tests.
 - ii. The Permittee shall determine the hourly average oxygen concentration by computing the hourly averages using all of the 15-minute readings taken during each performance test run.
 - iii. The Permittee shall determine the lowest hourly average established during the performance test as the minimum oxygen level operating limit.
 - iv. For a minimum oxygen level, if the Permittee conducts multiple performance tests, the Permittee shall set the minimum oxygen level at the lower of the minimum values established during the performance tests.
[40 CFR 63.7530(b)(4)(viii)]
 - b. A unit-specific for maximum operating load (operating limit).
[40 CFR 63.7510(a)(3); 40 CFR 63.7520(c); 40 CFR 63.7530(a) and (b); Item 7. of Table 4 to 40 CFR 63 Subpart DDDDD; and Item 5 of Table 7 to 40 CFR 63 Subpart DDDDD]
 - i. The Permittee shall collect operating load or steam generation data every 15 minutes during the entire period of the performance test.
 - ii. The Permittee shall determine the average operating load by computing the hourly averages using all of the 15-minute readings taken during each performance test run.
 - iii. The Permittee shall determine the highest hourly average of the three test run averages during the performance test, and multiply this by 1.1 (110 percent) as the operating limit.

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- c. If the Permittee opts to comply with the HCl emission limit in Condition 3.3.10a. using fuel analyses, the Permittee shall establish the maximum chlorine fuel input level (Clinput) during the fuel analyses according to 40 CFR 63.63.7530(b)(1).
[40 CFR 63.7530(b)(1)]
 - d. If the Permittee opts to comply with the Hg emission limit in Condition 3.3.10b. using fuel analyses, the Permittee shall establish the maximum mercury fuel input (Mercuryinput) during the fuel analyses according to 40 CFR 63.63.7530(b)(2).
[40 CFR 63.7530(b)(2)]
 - e. If the Permittee opts to comply with the alternative TSM emission limit in Condition 3.3.10d. using fuel analyses, the Permittee shall establish the maximum TSM fuel input level (TSMinput) during the fuel analyses according to 40 CFR 63.63.7530(b)(3).
[40 CFR 63.7530(b)(3)]
- 4.2.14 The Permittee shall report the results of performance tests required by Conditions 4.2.6 and 4.2.8 and any associated fuel analyses required by Conditions 4.2.7 and 4.2.9 within 60 days after the completion of the performance tests/fuel analyses. This report must also verify that the operating limits for the boiler have not changed or provide documentation of revised operating limits established in accordance with Conditions 4.2.13a. and b.
[391-3-1-.02(6)(b)1; 40 CFR 63.7515(f); and 40 CFR 70.6(a)(3)(i)]

PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)**5.2 Specific Monitoring Requirements**Modified Conditions

- 5.2.1 The Permittee shall install, calibrate, maintain and operate a system to continuously monitor and record the indicated pollutants on the following equipment. Each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- a. A Continuous Opacity Monitoring System (COMS) located on the RTO stacks for the measurement of opacity on each stack **for demonstrating compliance with the opacity standard of 40 CFR 60 Subpart Db for each of the Heat Energy Systems (HES1 and HES2).** The span value for each COMS shall be between 60 and 80 percent.
[40 CFR 60.48b(a); 40 CFR 60.48b(e)(1); and **40 CFR 60.49b(f)**]
- 5.2.2 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated parameters on the following equipment. Each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1 and **40 CFR 70.6(a)(3)(i)**]
- a. The combustion zone temperature of the RTOs (ID No. RTO1 and RTO2) and RCOs (ID Nos. RCO1 and RCO2). The temperature monitoring device shall have an accuracy of $\pm 2\%$ ($^{\circ}\text{F}$).
- b. The secondary voltage for each field of the Wet ESPs (ID Nos. WE01 and WE02). Such devices shall have a required accuracy of $\pm 2\%$.
- c. The secondary current for each field of the Wet ESPs (ID Nos. WE01 and WE02). Such devices shall have a required accuracy of $\pm 2\%$.
- 5.2.7 The Permittee shall calculate three-hour average Wet ESP (**ID Nos. WE01 and WE02**) secondary power using data measured per Condition 5.2.3.
[391-3-1-.02(6)(b)1, 40 CFR 60.48b(a), and 40 CFR 60.49b(f) for the energy system]
- 5.2.8 The Permittee shall ensure that temperatures in the RTO and RCO combustion zone are maintained above the levels required by Conditions 3.2.3 and 3.2.5 and measured using a temperature sensor. The Permittee shall calculate the three-hour average combustion **zone** temperature using data measured per Condition 5.2.2a.
[391-3-1-.02(6)(b)1 and **40 CFR 70.6(a)(3)(i)**]
- 5.2.13 The Permittee shall conduct a performance tune-up on the Heat Energy Systems (ID Nos. HES1 and HES2) biennially, as specified in 40 CFR 63.11223. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up and shall include the following:
[40 CFR 63.11196(a)(1), 40 CFR 63.11223(a) and (b), and Table 2 of 40 CFR 63 Subpart JJJJJ]

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- a. As applicable, inspect the burner and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection).
- b. Inspect the flame pattern, as applicable and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
- c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.
- d. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.
- e. Measure the concentrations in the effluent stream of carbon monoxide in parts per million by volume and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
- f. Maintain onsite the following information:
 - i. The concentrations of CO in the effluent stream in parts per million by volume and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the Heat Energy System.
 - ii. A description of any corrective actions taken as a part of the tune-up of the Heat Energy System.
 - iii. The type and amount of fuel used over the 12 months prior to the tune-up of the Heat Energy System.
- g. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.

This Condition shall be null and void on the 3rd anniversary of the issuance date of this Permit Amendment.

- 5.2.19 The Permittee shall comply with the performance criteria listed in the table below for the PM emissions from the **conveying equipment aspiration systems (ID Nos. CE01 and CE02)**, dry hammermill lines (ID No. HML) and pelletmill (ID No. PML).
[40 CFR 64.6(c)(1)(iii)]

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Performance Criteria [64.4(a)(3)]	Indicator No. 1 Baghouse Pressure Drop	Indicator No. 2 O&M baghouse checks
A. Data Representativeness [64.3(b)(1)]	Operations manuals, stack test data, vendor recommendation ensure data representativeness and accuracy.	Weekly baghouse checks identify any problem with baghouse operation.
B. Verification of Operational Status (new/modified monitoring equipment only) [64.3(b)(2)]	n/a	n/a
C. QA/QC Practices and Criteria [64.3(b)(3)]	Pressure gauges are calibrated and maintained per manufacturer specs.	Trained personnel perform weekly baghouse inspections
D. Monitoring Frequency [64.3(b)(4)]	daily	weekly
E. Data Collection Procedures [64.3(b)(4)]	Pressure drops are recorded electronically or manually in a operations logbook	Inspection results and corrective actions are recorded manually in a O&M log.
F. Averaging Period [64.3(b)(4)]	n/a	n/a

New Conditions – 40 CFR 63 Subpart DDDDD

5.2.21 Within 3 years after the issuance of this Permit Amendment, the Permittee shall conduct an annual tune-up of the Heat Energy Systems (HES1 and HES2). Each annual tune-up must be conducted no more than 13 months after the previous tune-up. The annual tune-up shall include the following:

[391-3-1-.02(6)(b)1(i); 40 CFR 63.7500(a)(1); 40 CFR 63.7510(e); 40 CFR 63.7515(d); 40 CFR 63.7530(h); 40 CFR 63.7540(a)(10); Item 3. of Table 3 to 40 CFR 63 Subpart DDDDD; and 40 CFR 70.6(a)(3)(i)]

- a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment.
- b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
- c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the Permittee may delay the inspection until the next scheduled unit shutdown).
- d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOx requirement to which the unit is subject.

- e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
- f. Maintain on-site and submit a report containing the information in Subparagraphs f.i. through f.iii. below.
 - i. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater.
 - ii. A description of any corrective actions taken as a part of the tune-up.
 - iii. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

If either HES1 or HES2 is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[40 CFR 63.7540(a)(13)]

- 5.2.22 Within 3 years after the issuance of this Permit Amendment, the Permittee shall install, calibrate, maintain, and operate a continuous monitoring system (CMS) to continuously monitor and record the oxygen data of the Heat Energy Systems (ID Nos. HES1 and HES2) flue gas (an **oxygen analyzer system** at each of the RTO exhaust stack) and **boiler operating load** (e.g., fuel consumption rate, steam generation rate, etc.) on each of HES1 and HES2. Where such performance specification(s) exist, the system shall meet the following requirements and the applicable performance specification(s) of the Division's monitoring requirements.

[391-3-1-.02(6)(b)1(i); 40 CFR 63.7525(a) and (d); 40 CFR 63.7540(a); Items 9. and 10. of Table 8 to 40 CFR 63 Subpart DDDDD; and 40 CFR 70.6(a)(3)(i)]

- a. The CMS must complete a minimum of one cycle of operation every 15-minutes. The Permittee shall have a minimum of four successive cycles of operation, one representing each of the four 15-minute periods in an hour, to have a valid hour of data.
- b. The Permittee shall operate the CMS in accordance with Condition 5.2.23b. and comply with the data calculation requirements specified in Condition 5.2.23c.
- c. Any 15-minute period for which the monitoring system is out-of-control and data are not available for a required calculation constitutes a deviation from the monitoring requirements. Other situations that constitute a monitoring deviation are specified in Condition 5.2.23d.

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- d. The Permittee shall determine the 30-day rolling average of all recorded readings, except as provided in Condition 5.2.23c.
- e. The Permittee shall record the results of each inspection, calibration, and validation check.

5.2.23 For the monitoring devices required by Condition 5.2.22:
[391-3-1-.02(6)(b)1(i); 40 CFR 63.7505(d); 40 CFR 63.7535(a) through (d); and 40 CFR 70.6(a)(3)(i)]

- a. Within 3 years after the issuance of this Permit Amendment, the Permittee shall develop a site-specific monitoring plan according to 40 CFR 63.7505(d)(1) through (d)(4).
- b. The Permittee shall operate the monitoring system and collect data at all required intervals at all times that the heat energy system is operating and compliance is required, except for periods of monitoring system malfunctions or out of control periods (see 40 CFR 63.8(c)(7)), and required monitoring system quality assurance or control activities, including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in the site-specific monitoring plan. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. The Permittee shall complete monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable.
- c. The Permittee shall not use data recorded during periods of startup and shutdown, monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities in data averages and calculations used to report emissions or operating levels. The Permittee shall record and make available upon request results of CMS performance audits and dates and duration of periods when the CMS is out of control to completion of the corrective actions necessary to return the CMS to operation consistent with the site-specific monitoring plan. The Permittee shall use all the data collected during all other periods in assessing compliance and the operation of the control device and associated control system.
- d. Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits, calibration checks, and required zero and span adjustments), failure to collect required data is a deviation of the monitoring requirements. In calculating monitoring results, do not use any data collected during periods of startup and shutdown, when the monitoring system is out of control as specified in the site-specific monitoring plan, while conducting repairs associated with periods when the monitoring system is out of control, or while conducting required monitoring system quality assurance or quality control activities. The Permittee shall calculate monitoring results using all other monitoring data

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collected while the process is operating. The Permittee shall report all periods when the monitoring system is out of control in the semi-annual report.

- 5.2.24 Within 3 years after the issuance of this Permit Amendment, the Permittee shall perform a one-time energy assessment by a qualified energy assessor for the Heat Energy Systems (ID Nos. HES1 and HES2) following the procedures specified in Item 4. of Table 3 to 40 CFR 63 Subpart DDDDD.
- [391-3-1-.02(6)(b)1(i); 40 CFR 63.7500(a)(1); Item 4. of Table 3 to 40 CFR 63 Subpart DDDDD; and 40 CFR 70.6(a)(3)(i)]

PART 6.0 OTHER RECORD KEEPING AND REPORTING REQUIREMENTS**6.1 General Record Keeping and Reporting Requirements**Amended Condition

6.1.7 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition 6.1.4, the following excess emissions, exceedances, and excursions shall be reported:

[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(iii)]

- a. Excess emissions: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping which is specifically defined, or stated to be, excess emissions by an applicable requirement)
 - i. Any hour during which the average opacity reading by the COMS required by Condition 5.2.1a. that exceeds 20 percent.
[40 CFR 60.49b(h)(1) and (3)].
- b. Exceedances: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)
 - i. [Deleted]
 - ii. Any rolling twelve consecutive month total NO_x, CO or VOC emissions from the facility in excess of 249 tons.
 - iii. **Any time that the fuel burned in the Heat Energy Systems (HES1 and HES2) does not meet the requirements specified in Condition 3.3.7.**
- c. Excursions: (means for the purpose of this Condition and Condition 6.1.4, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring)
 - i. Any three-hour average combustion **zone** temperature of the **existing** Regenerative Thermal Oxidizers (ID Nos. RTO1 or RTO2), measured and recorded per Condition 5.2.2a., **that is** below the minimum combustion **zone** temperature **specified in Condition 3.2.3.**
 - ii. Any three-hour average RCO combustion zone temperature of the Regenerative Catalytic Oxidizers (RCO1 and/or RCO2), measured and recorded per Condition 5.2.2a., **that is** below the **minimum** combustion zone temperature specified in Condition 3.2.4.

- iii. Any three-hour average total power for the Wet ESP (WE01 and WE02), **determined in accordance with Condition 5.2.3**, is less than 80 percent of the **minimum total secondary power established in accordance with Condition 4.2.4a**.
- iv. Any visible emissions from any baghouse, including the Pelletizing Area Vacuum System Baghouse (PAB1) which occurs for two consecutive determinations.
- v. Anytime the annual catalyst bed core sampling was not performed as required by Condition 5.2.11.
- vi. Anytime the catalyst was not cleaned or replaced as required by Condition 5.2.12.
- vii. Anytime the performance tune-up of the Heat Energy Systems (ID Nos. HES1 and HES2) was not performed once every two years per Condition 5.2.13.

This subparagraph shall be null and void on the 3rd anniversary of the issuance date of this Permit Amendment.

- viii. Any adverse condition regarding fugitive dust emissions as required per Condition 5.2.20.
- ix. **Any three-hour average combustion zone temperature of the new Regenerative Thermal Oxidizers (ID Nos. RTO1 or RTO2), measured and recorded per Condition 5.2.2a., that is below the minimum combustion zone temperature specified in Condition 3.2.6.**
- x. **Anytime the annual tune-up of the Heat Energy Systems (ID Nos. HES1 and HES2) was not performed as per Condition 5.2.21.**
- xi. **Starting 3 years after the issuance of this Permit Amendment, any 30-day rolling average operating load of any Heat Energy Systems (ID Nos. HES1 and HES2), recorded in accordance with Condition 5.2.22, that exceeds 110% of the highest hourly average operating load specified in Condition 3.3.13.**
[40 CFR 63.7540(a)(1) and 40 CFR 63.7540(b)]
- xii. **Starting 3 years after the issuance of this Permit Amendment, any 30-day rolling average oxygen content below the lowest hourly average oxygen concentration specified in Condition 3.3.14.**
[40 CFR 63.7540(a)(1) and 40 CFR 63.7540(b)]
- xiii. **Any time that any of the PM control devices, specified in Condition 3.2.1, are not in operation when the associated emission units are in operation.**

6.2 Specific Record Keeping and Reporting Requirements

Modified Conditions

- 6.2.1 The Permittee shall calculate the monthly NO_x and CO emissions from **the Heat Energy Systems (ID Nos. HES1 and HES2)/dryers (ID Nos. DRY1 and DRY2)/RTO (ID Nos. RTO1 and RTO2) exhaust; from RTO bypass events during idle, cold start, and planned shutdown; from the RCO (ID Nos. RCO1 and RCO2) exhaust; and from internal combustion engines** using the records from Condition 6.2.10 and the following equations. All emission factors and calculations shall be kept as part of the monthly records, available for inspection or submittal.

[391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)(i)]

$$E_{NOx} = \sum [(ED_{NOxi}) (DRI)]/2000$$

$$E_{CO} = \sum [(ED_{COi}) (DRI)]/2000$$

Where:

E_{NOx} = Monthly NO_x emission rate, in tons/mo.

E_{CO} = Monthly CO emission rate, in tons/mo.

ED_{NOxi} = Emission Factor for RTO_i, in lb NO_x/ODT.

ED_{COi} = Emission Factor for RTO_i, in lb CO/ODT.

DRI = Monthly Product from Dryer *i*, in ODT/mo.

The Permittee shall calculate NO_x and CO emissions by using the following emission factors and the equation provided in this condition. If the emissions testing required in Section 4 reveals emission factors higher than these listed below, the Permittee shall comply with Condition 4.2.2

Table 6.2.1-1		
Emission Point	ED _{NOx} lb/ODT*	ED _{CO} lb/ODT*
HES1/DRY1 (RTO1)	0.38	0.26
HES2/DRY2 (RTO2)	0.38	0.26

* Oven Dried Tons = Weight of wood in tons at 0% moisture, calculated

The Permittee shall calculate the facility-wide monthly NO_x and CO emissions as follows:

$$ET_{NOx} = E_{NOx} + 2.52$$

$$ET_{CO} = E_{CO} + 2.35$$

Where:

ET_{NOx} = Monthly facility-wide NO_x emission rate, in tons/mo.

ET_{CO} = Monthly facility-wide CO emission rate, in tons/mo.

2.52 = NO_x Potential emissions from **RTO bypasses (idle, cold start, and planned shutdown)**, RCOs, and internal combustion engines, in tons/mo.

2.35 = CO Potential emissions from **RTO bypasses (idle, cold start, and planned shutdown)**, RCOs, and internal combustion engines, in tons/mo.

The Permittee shall notify the Division in writing if facility-wide total NO_x or CO emissions exceed 20.7 tons during any calendar month. This notification shall be postmarked by the fifteenth day of the following month.

6.2.2 **The Permittee shall calculate the monthly VOC emissions from the units controlled by RTO1, RTO2, RCO1, and RCO2 and other processes using the records from Condition 6.2.10 and the following equations.** All emission factors and calculations shall be kept as part of the monthly records, available for inspection or submittal.
[391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)(i)]

VOC emissions shall be calculated using EPA OTM-26:

VOC = [Method 25A VOC as propane + Methanol as methanol + Formaldehyde as formaldehyde + Acetaldehyde as acetaldehyde] – [(0.65) Methanol expressed as propane]

VOC emissions shall be calculated each month using the following equation.

$$ET_{\text{VOC}} = [(ED1*DR1)+(ED2*DR2)+(ERC1*PH)+(ERC2*PP)]/2000 + 0.60$$

Where:

ET_{voc} = Monthly facility-wide VOC emission, in tons/mo.
 ED1/ED2 = VOC Emission Factor for RTO1 and RTO2, in lb VOC/ODT.
 DR1/DR2 = Monthly Product from Dryers DRY1 and DRY2, in ODT/mo.
 ERC1 = VOC Emission Factor for units controlled by the RCO1 (Hammermill lines and associated equipment), in lb VOC/ODT
PH = Monthly throughput rate for hammermill lines (for RCO1), in ODT/mo
 ERC2 = Emission Factor for units controlled by the RCO2 (pellet mills and pellet coolers and associated equipment), in lb VOC/ODT
PP = Monthly throughput rate for pellet mills (for RCO2), in ODT/mo (0% moisture, calculated)
0.60 = **VOC potential emissions from RTO bypasses (idle, cold start, and planned shutdown), other processes (BH01, LC02, LC03, GCS1, and GCS2), and internal combustion engines, in tons/mo.**

The Permittee shall calculate VOC emissions by using the following emission factors and the equation provided in this condition. If the emissions testing required in Section 4 reveals emission factors higher than these listed below, the Permittee shall comply with Conditions 4.2.3 and 4.2.4.

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Table 6.2.2-1	
Emission Point	VOC Emission Factor (lb/ODT)
HES1/DRY1 (RTO1) "ED1"	0.26
HES2/DRY2 (RTO2) "ED2"	0.26
RCO1 "ERC1"	0.17
RCO2 "ERC2"	0.13

The Permittee shall notify the Division in writing if facility-wide total VOC emissions exceed 20.7 tons during any calendar month. This notification shall be postmarked by the fifteenth day of the following month.

- 6.2.3 The Permittee shall use the monthly NO_x, CO, and VOC emission data from Conditions 6.2.1 and 6.2.2 to calculate the twelve-month rolling total of each pollutant for each calendar month in the semiannual reporting period. A twelve-month rolling total shall be defined as the sum of the current month's total plus the totals for the previous eleven consecutive months. These records shall be kept available for inspection or submittal.
[391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)(i)]
- 6.2.4 [Deleted]
- 6.2.6 The Permittee shall maintain the following records in order to comply with the recordkeeping requirements of 40 CFR 63 Subpart JJJJJ for the Heat Energy Systems (HES1 and HES2).
[40 CFR 63.11214, 40 CFR 63.11223, 40 CFR 63.11225(c), and 40 CFR Subpart 241]
- The Permittee must keep a copy of each notification and report that is submitted to comply with Subpart JJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that is submitted.
 - The Permittee must keep records to document conformance with the work practices, emission reduction measures and management practices required by 40 CFR 63.11214 and 63.11223 as specified:
 - Records must identify each Heat Energy System, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the Heat Energy System was tuned.
 - Records documenting that no secondary materials that are solid waste were combusted in the Heat Energy Systems in accordance with the definitions and The Permittee must keep a copy of the energy assessment report.
 - Records of the occurrence and duration of each malfunction of the heat energy system, or of the associated air pollution control and monitoring equipment.
 - Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions as required by Condition 3.3.5

in accordance with 40 CFR 63.11205(a), including corrective actions to restore the malfunctioning Heat Energy System, air pollution control, or monitoring equipment to its normal or usual manner of operation.

This Condition shall be null and void on the 3rd anniversary of the issuance date of this Permit Amendment.

- 6.2.7 The Permittee shall prepare and submit to the Division a biennial compliance report to comply with the requirements of 40 CFR 63 Subpart JJJJJ, which shall include the following information: [40 CFR 63.11225(b)]
- a. Company name and address.
 - b. Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of Subpart JJJJJ. The notification must include the following certification(s) of compliance, as applicable, signed by a responsible official:
 - i. “This facility complies with the requirements in 40 CFR 63.11223 to conduct a biennial tune-up of each Heat Energy System.”
 - ii. “No secondary materials that are solid waste were combusted in the Heat Energy System.”
 - c. A description of any deviations, the time periods during which the deviations occurred, and the corrective actions taken.

This Condition shall be null and void on the 3rd anniversary of the issuance date of this Permit Amendment.

- 6.2.10 **The Permittee shall keep operating records to determine the total amount of wood chips and wood pellet processed in actual tons (actual moisture content) and oven dried tons (ODT) (short tons) in the Drum Dryers (DRY1 and DRY2), the Hammermills (HML), the Pellet Mills (PML), the Pellet Cooler (PCL), and the Railcar Loadout (RL), on a monthly basis by recording all raw material inputs. The oven dried tons shall be calculated as below:**
Oven dried ton (ODT) = weight of wood in tons at 0% moisture, calculated).

The records shall be available for inspection or submittal to the Division, upon request. [391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

- 6.2.11 **The Permittee shall use the records obtained in accordance with Condition 6.2.10, maintain records, and submit the following records to the Division, within the semiannual reports required by Condition 6.1.4. The records shall be available for inspection upon request.**
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- a. **The quantity of pellets produced by the pellet mills/pellet coolers (ID Nos. PML and PCL) during each calendar month in the semiannual reporting period.**
 - b. **The total quantity of pellets produced by the pellet mills/pellet coolers (ID Nos. PML and PCL) for the 12 consecutive month period ending with each calendar month in the semiannual reporting period. Such record shall be used to demonstrate compliance with Condition 3.2.7.**

New Conditions

40 CFR 60 Subpart Db

- 6.2.12 The Permittee shall record and maintain daily records of the amounts of wood combusted in the Heat Energy Systems (ID Nos. HES1 and HES2). These records shall be maintained in a format suitable for inspection or submittal at all times.
[391-3-1-.02(6)(b)1; 40 CFR 60.49b(d)(2); and 40 CFR 70.6(a)(3)(i)]

40 CFR 63 Subpart DDDDD

- 6.2.13 Within 3 years after the issuance of this Permit Amendment, if the Permittee chooses to comply using definition (2) of “startup” in 40 CFR 63.7575, the Permittee shall develop and implement a written startup and shutdown plan (SSP) according to the requirements in Condition 3.3.11c.ii. The SSP must be maintained onsite and available upon request for public inspection.
[391-3-1-.02(6)(b)1(i); 40 CFR 63.7505(e); and 40 CFR 70.6(a)(3)(i)]
- 6.2.14 Within 60 days following the completion of all initial performance tests required by Conditions 4.2.6 and 4.2.7, the Permittee shall submit to the Division a Notification of Compliance Status that contains the following information:
[391-3-1-.02(6)(b)1(i); 40 CFR 63.7495(d); 40 CFR 63.7530(f); 40 CFR 63.7545(e); and 40 CFR 70.6(a)(3)(i)]
- a. A description of the affected boilers including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR 63 Subpart DDDDD, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by the Permittee or the EPA through a petition process to be a non-waste under 40 CFR 241.3, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of 40 CFR 241.3, and justification for the selection of fuel(s) burned during the compliance demonstration.

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- b. Summary of the results of all performance tests and calculations conducted to demonstrate initial compliance including all established operating limits, and including:
 - i. Identification of whether the Permittee is complying with the PM emission limit or the alternative TSM emission limit.
 - ii. Identification of whether the Permittee is complying the arithmetic mean of all valid hours of data from the previous 30 operating days or of the previous 720 hours. This identification shall be specified separately for each operating parameter.
 - c. A summary of the maximum CO emission levels recorded during the performance test to show that the Permittee has met any applicable emission standard in Table 2 to 40 CFR 63 Subpart DDDDD, if the Permittee is not using a CO CEMS to demonstrate compliance.
 - d. Identification of whether the Permittee plans to demonstrate compliance with each applicable emission limit through performance testing, a CEMS, or fuel analysis.
 - e. A signed certification that the Permittee has met all applicable emission limits and work practice standards.
 - e. If the Permittee had a deviation from any emission limit, work practice standard, or operating limit, the Permittee shall also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.
 - f. In addition, the notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official:
 - i. “This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR part 63 subpart DDDDD at this site.”
 - ii. “This facility has had an energy assessment performed according to 40 CFR 63.7530(e).”
 - iii. Except for units that burn only natural gas, refinery gas, or other gas 1 fuel, or units that qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act, include the following: “No secondary materials that are solid waste were combusted in any affected unit.”
- 6.2.15 Beginning three years after the issuance of this Permit Amendment, the Permittee shall submit semiannual compliance reports that contain the following information for the Heat Energy Systems (ID Nos. HES1 and HES2) for each semiannual period ending June 30 and December 31 of each year. The first semiannual compliance report must cover the period beginning on the 3rd anniversary date of this Permit Amendment and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the 3rd

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anniversary date. All reports shall be postmarked by July 31 and January 31, respectively, following each reporting period.

[391-3-1-.02(6)(b)1(i); 40 CFR 63.7550(a); 40 CFR 63.7550(b)(1) through (b)(5); 40 CFR 63.7550(c)(1) through (c)(5); Items 1.a. through 1.d. of Table 9 to 40 CFR 63 Subpart DDDDD; and 40 CFR 70.6(a)(3)(i)]

- a. For the annual tune up requirements specified in Condition 5.2.21, the Permittee shall submit a compliance report with the information in Subparagraphs d.i. through d.iii., d.xiii. and d.xiv. of this Condition.
- b. For the fuel analyses required by Conditions 4.2.7 and 4.2.9, the Permittee shall submit a compliance report with the information in Subparagraphs d.i. through d.iii., d.v., d.ix., d.x., d.xii., d.xiv., d.xv. of this Condition and Condition 6.2.16.
- c. For the performance tests required by Conditions 4.2.6, 4.2.8, and 4.2.11, the Permittee shall submit a compliance report with the information in Subparagraphs d.i. through d.iii., d.v. through d.viii., d.x., d.xii., d.xiv., and d.xv. of this Condition and Condition 6.2.16.
- d. The following information must be included for the purposes of Paragraphs a. through c. of this Condition, as applicable, in the semiannual compliance reports:
 - i. Company and Facility name and address.
 - ii. Process unit information, emissions limitations, and operating parameter limitations.
 - iii. Date of report and beginning and ending dates of the reporting period.
 - iv. For the oxygen analyzer system (CMS) and operating load CMS required by Condition 5.2.22, the Permittee shall include the monitoring equipment manufacturer(s) and model numbers and the date of the last CMS certification or audit.
 - v. The total fuel use by each individual boiler subject to an emission limit within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by the EPA or the Permittee's basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure.
 - vi. For the 3-year performance tests specified in Condition 4.2.8b., the date of the last 2 performance tests and a statement as to whether there have been any operational changes since the last performance test that could increase emissions.
 - vii. A statement indicating that the Permittee burned no new types of fuel in an individual boiler subject to an emission limit. Or, if the Permittee did burn a new type of fuel and are subject to a HCl emission limit, the Permittee shall submit the calculation of chlorine input, using Equation 7 of 40 CFR 63.7530, that

demonstrates that the boiler is still within its maximum chlorine input level established during the previous performance testing. If the Permittee burned a new type of fuel and are subject to a mercury emission limit, the Permittee shall submit the calculation of mercury input, using Equation 8 of 40 CFR 63.7530, that demonstrates that the boiler is still within its maximum mercury input level established during the previous performance testing. If the Permittee burned a new type of fuel and are subject to a TSM emission limit, the Permittee shall submit the calculation of TSM input, using Equation 9 of 40 CFR 63.7530, that demonstrates that the boiler is still within its maximum TSM input level established during the previous performance testing.

- viii. If the Permittee wishes to burn a new type of fuel in an individual boiler subject to an emission limit and the Permittee cannot demonstrate compliance with the maximum chlorine/mercury/TSM input operating limits using Equations 7, 8, or 9 of 40 CFR 63.7530, the Permittee shall include in the compliance report a statement indicating the intent to conduct a new performance test within 60 days of starting to burn the new fuel.
- ix. A summary of any monthly fuel analyses conducted to demonstrate compliance according to Conditions 4.2.12 and 4.2.13 for individual boilers or process heaters subject to emission limits.
- x. If there are no deviations from any emission limits or operating limits in Conditions 3.2.10., 3.3.13, and 3.3.14, a statement that there were no deviations from the emission limits or operating limits during the reporting period.
- xi. If there were no deviations from the monitoring requirements including no periods during which the oxygen analyzer system (CMS) and operating load CMS required by Condition 5.2.22 were out of control as specified in 40 CFR 63.8(c)(7), a statement that there were no deviations and no periods during which the CMS were out of control during the reporting period.
- xii. If a malfunction occurred during the reporting period, the report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken during a malfunction of a boiler or associated air pollution control device or CMS to minimize emissions in accordance with Condition 3.3.15, including actions taken to correct the malfunction.
- xiii. Include the date of the most recent tune-up for HES1 and HES2 subject to only the requirement to conduct an annual tune-up according to Condition 5.2.21. Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown.
- xiv. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

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- xv. For each instance of startup or shutdown include the information required to be monitored, collected, or recorded according to the requirements of Condition 6.2.22.
 - e. If there is a deviation from any emission limitation (emission limit and operating limit) where the Permittee is not using a CMS to comply with that emission limit or operating limit, or a deviation from a work practice standard for periods of startup and shutdown, during the reporting period, the report must contain the information in Condition 6.2.16.
 - f. If there were periods during which the CMSs, including the oxygen analyzer system (CMS) and operating load CMS required by Condition 5.2.22, were out-of-control as specified in 40 CFR 63.8(c)(7), or otherwise not operating, the report must contain the information in Condition 6.2.17.
- 6.2.16 Beginning three years after the issuance of this Permit Amendment, for each deviation from an emission limit or operating limit in Conditions 3.2.10., 3.3.13, and 3.3.14 that occurs at the Heat Energy Systems (ID Nos. HES1 and HES2) where the Permittee is not using a CMS to comply with that emission limit or operating limit, or from the work practice standards specified in Conditions 3.3.11 and 3.3.12 for periods of startup and shutdown, the compliance report must additionally contain the following.
[391-3-1-.02(6)(b)1(i); 40 CFR 63.7550(d); and 40 CFR 70.6(a)(3)(i)]
- a. A description of the deviation and which emission limit, operating limit, or work practice standard from which the boiler deviated.
 - b. Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.
 - c. If the deviation occurred during an annual performance test, provide the date the annual performance test was completed.
- 6.2.17 Beginning three years after the issuance of this Permit Amendment, for each deviation from an emission limit, operating limit, and monitoring requirement in Conditions 3.2.10., 3.3.13, 3.3.14, 5.2.22, and 5.2.23 occurring at the Heat Energy Systems (ID Nos. HES1 and HES2) where the Permittee are using a CMS to comply with that emission limit or operating limit, the compliance report must additionally contain the following information. This includes any deviations from the site-specific monitoring plan as required in Condition 5.2.23a.
[391-3-1-.02(6)(b)1(i); 40 CFR 63.7550(e); and 40 CFR 70.6(a)(3)(i)]
- a. The date and time that each deviation started and stopped and description of the nature of the deviation (i.e., what the boiler deviated from).
 - b. The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.
 - c. The date, time, and duration that each CMS was out of control, including the information in 40 CFR 63.8(c)(8).

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- d. The date and time that each deviation started and stopped.
 - e. A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total boiler operating time during that reporting period.
 - f. A characterization of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
 - g. A summary of the total duration of CMS's downtime during the reporting period and the total duration of CMS downtime as a percent of the total boiler operating time during that reporting period.
 - h. A brief description of the boiler for which there was a deviation.
 - i. A description of any changes in CMSs, processes, or controls since the last reporting period for the boiler for which there was a deviation.
- 6.2.18 Within 60 days following the completion of each performance test required by Conditions 4.2.6, and 4.2.8, the Permittee shall submit the results of the performance test, including any fuel analyses, to the EPA via the **Compliance and Emissions Data Reporting Interface (CEDRI)**. (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>.) Performance test data must be submitted in a file format generated through use of the EPA's ERT or an electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site. If the Permittee claims that some of the performance test information being submitted is confidential business information (CBI), the Permittee shall submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this Condition.
[391-3-1-.02(6)(b)1(i); 40 CFR 63.7550(h)(1)(i); and 40 CFR 70.6(a)(3)(i)]
- 6.2.19 Beginning three years after the issuance of this Permit Amendment, the Permittee shall submit all reports required by Condition 6.2.15 electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The Permittee shall use the appropriate electronic report in CEDRI for 40 CFR 63 Subpart DDDDD. Instead of using the electronic report in CEDRI for 40 CFR 63 Subpart DDDDD, the Permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to 40 CFR 63 Subpart DDDDD is not available in CEDRI at the time that the report is due, the Permittee shall submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. The Permittee shall begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.
[391-3-1-.02(6)(b)1(i); 40 CFR 63.7550(h)(3); and 40 CFR 70.6(a)(3)(i)]

- 6.2.20 Beginning three years after the issuance of this Permit Amendment, the Permittee shall keep the following records:
[391-3-1-.02(6)(b)1(i); 40 CFR 63.7555(a); and 40 CFR 70.6(a)(3)(i)]
- a. A copy of each notification and report that was submitted to comply with 40 CFR 63 Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance reports that were submitted.
 - b. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations.
- 6.2.21 Beginning three years after the issuance of this Permit Amendment, the Permittee shall keep the records required in Conditions 5.2.22a. and d., including records of all monitoring data and calculated averages for applicable operating limits, such as opacity and operating load, to show continuous compliance with each associate emission limit and operating limit.
[391-3-1-.02(6)(b)1(i); 40 CFR 63.7555(c); and 40 CFR 70.6(a)(3)(i)]
- 6.2.22 Beginning three years after the issuance of this Permit Amendment, the Permittee shall also keep the following records for the Heat Energy Systems (ID Nos. HES1 and HES2):
[391-3-1-.02(6)(b)1(i); 40 CFR 63.7555(d); and 40 CFR 70.6(a)(3)(i)]
- a. Records of monthly fuel use by HES1 and HES2, each, including the type(s) of fuel and amount(s) used.
[40 CFR 63.7540(a)(2)]
 - b. If the Permittee combusts non-hazardous secondary materials that have been determined not to be solid waste pursuant to 40 CFR 241.3(b)(1) and (2), the Permittee shall keep a record that documents how the secondary material meets each of the legitimacy criteria under 40 CFR 241.3(d)(1). If the Permittee combusts a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(4), the Permittee shall keep records as to how the operations that produced the fuel satisfy the definition of processing in 40 CFR 241.2. If the fuel received a non-waste determination pursuant to the petition process submitted under 40 CFR 241.3(c), the Permittee shall keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust non-hazardous secondary materials as fuel per 40 CFR 241.4, the Permittee shall keep records documenting that the material is listed as a non-waste under 40 CFR 241.4(a). Units exempt from the incinerator standards under section 129(g)(1) of the Clean Air Act because they are qualifying facilities burning a homogeneous waste stream do not need to maintain the records described in this Paragraph.
 - c. A copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 7 of 40 CFR 63.7530, that were done to demonstrate continuous compliance with the HCl emission limit, for boilers that demonstrate compliance through performance testing. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum chlorine fuel input or HCl

emission rates. The Permittee may use the results from one fuel analysis for multiple boilers provided they are all burning the same fuel type. However, the Permittee shall calculate chlorine fuel input, or HCl emission rate, for HES1 and HES2.

- d. A copy of all calculations and supporting documentation of maximum mercury fuel input, using Equation 8 of 40 CFR 63.7530, that were done to demonstrate continuous compliance with the mercury emission limit for boilers that demonstrate compliance through performance testing. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum mercury fuel input or mercury emission rates. The Permittee may use the results from one fuel analysis for multiple boilers provided they are all burning the same fuel type. However, the Permittee shall calculate mercury fuel input, or mercury emission rates, for HES1 and HES2.
- e. If, consistent with Condition 4.2.8b., the Permittee chooses to stack test less frequently than annually, the Permittee shall keep a record that documents that the emissions in the previous stack test(s) were less than 75 percent of the applicable emission limit, and document that there was no change in boiler operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year.
- f. Records of the occurrence and duration of each malfunction of the boiler or of the associated air pollution control and monitoring equipment.
- g. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in Condition 3.3.15, including corrective actions to restore the malfunctioning boiler or process heater, air pollution control, or monitoring equipment to its normal or usual manner of operation.
- h. Records of the calendar date, time, occurrence and duration of each startup and shutdown.
- i. Records of the type(s) and amount(s) of fuels used during each startup and shutdown.
- j. For each startup period, for boilers selecting definition (2) of “startup” in 40 CFR 63.7575, the Permittee shall maintain records of the time that clean fuel combustion begins; the time when the Permittee starts feeding fuels that are not clean fuels; the time when useful thermal energy is first supplied; and the time when the PM controls are engaged.
- k. If the Permittee chooses to rely on definition (2) of “startup” in 40 CFR 63.7575, for each startup period, the Permittee shall maintain records of the hourly steam temperature, hourly steam pressure, hourly steam flow, hourly flue gas temperature, and all hourly average CMS data (e.g., oxygen analyzer system and operating load CMS) collected during each startup period to confirm that the control devices are engaged. In addition, for HES1 and HES2 with electrostatic precipitators (ID No. WE01 and WE02), the Permittee shall record the number of fields in service, as well as each field's secondary voltage and secondary current during each hour of startup.

1. If the Permittee chooses to use definition (2) of “startup” in 40 CFR 63.7575 and finds that the Permittee is unable to safely engage and operate the PM control(s) within 1 hour of first firing of non-clean fuels, the Permittee may choose to rely on definition (1) of “startup” in 40 CFR 63.7575 or the Permittee may submit to the Division a request for a variance with the PM controls requirement, as described below.
 - i. The request shall provide evidence of a documented manufacturer-identified safety issue.
 - ii. The request shall provide information to document that the PM control device is adequately designed and sized to meet the applicable PM emission limit.
 - iii. In addition, the request shall contain documentation that:
 - A. The boiler is using clean fuels to the maximum extent possible to bring the unit and PM control device up to the temperature necessary to alleviate or prevent the identified safety issues prior to the combustion of primary fuel;
 - B. The boiler has explicitly followed the manufacturer’s procedures to alleviate or prevent the identified safety issue; and
 - C. Identifies with specificity the details of the manufacturer’s statement of concern.
 - iv. The Permittee shall comply with all other work practice requirements, including but not limited to data collection, recordkeeping, and reporting requirements.
- 6.2.23 The Permittee shall keep all records in a form suitable and readily available for expeditious review. All records must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; with at least 2 years onsite and the remaining 3 years offsite.
[391-3-1-.02(6)(b)1(i); 40 CFR 63.7560; and 40 CFR 70.6(a)(3)(i)]

Attachments

- B. Insignificant Activities Checklist, Insignificant Activities Based on Emission Levels and Generic Emission Groups

Title V Permit Amendment

Enviva Pellets Waycross, LLC

Permit No.: 2499-299-0053-V-04-1

ATTACHMENT B

NOTE: Attachment B contains information regarding insignificant emission units/activities and groups of generic emission units/activities in existence at the facility at the time of Permit issuance. Future modifications or additions of insignificant emission units/activities and equipment that are part of generic emissions groups may not necessarily cause this attachment to be updated.

INSIGNIFICANT ACTIVITIES CHECKLIST

Category	Description of Insignificant Activity/Unit	Quantity
Mobile Sources	1. Cleaning and sweeping of streets and paved surfaces	
Combustion Equipment	1. Firefighting and similar safety equipment used to train fire fighters or other emergency personnel.	
	2. Small incinerators that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act and are not considered a “designated facility” as specified in 40 CFR 60.32e of the Federal emissions guidelines for Hospital/Medical/Infectious Waste Incinerators, that are operating as follows:	
	i) Less than 8 million BTU/hr heat input, firing types 0, 1, 2, and/or 3 waste.	
	ii) Less than 8 million BTU/hr heat input with no more than 10% pathological (type 4) waste by weight combined with types 0, 1, 2, and/or 3 waste.	
	iii) Less than 4 million BTU/hr heat input firing type 4 waste. (Refer to 391-3-1-.03(10)(g)2.(ii) for descriptions of waste types)	
	3. Open burning in compliance with Georgia Rule 391-3-1-.02 (5).	
	4. Stationary engines burning:	
	i) Natural gas, LPG, gasoline, dual fuel, or diesel fuel which are used exclusively as emergency generators shall not exceed 500 hours per year or 200 hours per year if subject to Georgia Rule 391-3-1-.02(2)(mmm).7	0
	ii) Natural gas, LPG, and/or diesel fueled generators used for emergency, peaking, and/or standby power generation, where the combined peaking and standby power generation do not exceed 200 hours per year.	
	iii) Natural gas, LPG, and/or diesel fuel used for other purposes, provided that the output of each engine does not exceed 400 horsepower and that no individual engine operates for more than 2,000 hours per year.	1
	iv) Gasoline used for other purposes, provided that the output of each engine does not exceed 100 horsepower and that no individual engine operates for more than 500 hours per year.	
Trade Operations	1. Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities whose emissions of hazardous air pollutants (HAPs) fall below 1,000 pounds per year.	
Maintenance, Cleaning, and Housekeeping	1. Blast-cleaning equipment using a suspension of abrasive in water and any exhaust system (or collector) serving them exclusively.	
	2. Portable blast-cleaning equipment.	
	3. Non-Perchloroethylene Dry-cleaning equipment with a capacity of 100 pounds per hour or less of clothes.	
	4. Cold cleaners having an air/vapor interface of not more than 10 square feet and that do not use a halogenated solvent.	
	5. Non-routine clean out of tanks and equipment for the purposes of worker entry or in preparation for maintenance or decommissioning.	
	6. Devices used exclusively for cleaning metal parts or surfaces by burning off residual amounts of paint, varnish, or other foreign material, provided that such devices are equipped with afterburners.	
	7. Cleaning operations: Alkaline phosphate cleaners and associated cleaners and burners.	

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INSIGNIFICANT ACTIVITIES CHECKLIST

Category	Description of Insignificant Activity/Unit	Quantity
Laboratories and Testing	1. Laboratory fume hoods and vents associated with bench-scale laboratory equipment used for physical or chemical analysis.	
	2. Research and development facilities, quality control testing facilities and/or small pilot projects, where combined daily emissions from all operations are not individually major or are support facilities not making significant contributions to the product of a collocated major manufacturing facility.	
Pollution Control	1. Sanitary wastewater collection and treatment systems, except incineration equipment or equipment subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	2. On site soil or groundwater decontamination units that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	3. Bioremediation operations units that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	4. Landfills that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
Industrial Operations	1. Concrete block and brick plants, concrete products plants, and ready mix concrete plants producing less than 125,000 tons per year.	
	2. Any of the following processes or process equipment which are electrically heated or which fire natural gas, LPG or distillate fuel oil at a maximum total heat input rate of not more than 5 million BTUs per hour:	
	i) Furnaces for heat treating glass or metals, the use of which do not involve molten materials or oil-coated parts.	
	ii) Porcelain enameling furnaces or porcelain enameling drying ovens.	
	iii) Kilns for firing ceramic ware.	
	iv) Crucible furnaces, pot furnaces, or induction melting and holding furnaces with a capacity of 1,000 pounds or less each, in which sweating or distilling is not conducted and in which fluxing is not conducted utilizing free chlorine, chloride or fluoride derivatives, or ammonium compounds.	
	v) Bakery ovens and confection cookers.	
	vi) Feed mill ovens.	
	vii) Surface coating drying ovens	
	3. Carving, cutting, routing, turning, drilling, machining, sawing, surface grinding, sanding, planing, buffing, shot blasting, shot peening, or polishing; ceramics, glass, leather, metals, plastics, rubber, concrete, paper stock or wood, also including roll grinding and ground wood pulping stone sharpening, provided that:	
	i) Activity is performed indoors; &	
	ii) No significant fugitive particulate emissions enter the environment; &	
	iii) No visible emissions enter the outdoor atmosphere.	
	4. Photographic process equipment by which an image is reproduced upon material sensitized to radiant energy (e.g., blueprint activity, photographic developing and microfiche).	
	5. Grain, food, or mineral extrusion processes	
	6. Equipment used exclusively for sintering of glass or metals, but not including equipment used for sintering metal-bearing ores, metal scale, clay, fly ash, or metal compounds.	
	7. Equipment for the mining and screening of uncrushed native sand and gravel.	
	8. Ozonization process or process equipment.	
	9. Electrostatic powder coating booths with an appropriately designed and operated particulate control system.	
	10. Activities involving the application of hot melt adhesives where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year.	
	11. Equipment used exclusively for the mixing and blending water-based adhesives and coatings at ambient temperatures.	
	12. Equipment used for compression, molding and injection of plastics where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year.	
	13. Ultraviolet curing processes where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year.	

Title V Permit Amendment

Enviva Pellets Waycross, LLC

Permit No.: 2499-299-0053-V-04-1

INSIGNIFICANT ACTIVITIES CHECKLIST

Category	Description of Insignificant Activity/Unit	Quantity
Storage Tanks and Equipment	1. All petroleum liquid storage tanks storing a liquid with a true vapor pressure of equal to or less than 0.50 psia as stored.	
	2. All petroleum liquid storage tanks with a capacity of less than 40,000 gallons storing a liquid with a true vapor pressure of equal to or less than 2.0 psia as stored that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	1
	3. All petroleum liquid storage tanks with a capacity of less than 10,000 gallons storing a petroleum liquid.	1
	4. All pressurized vessels designed to operate in excess of 30 psig storing petroleum fuels that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	5. Gasoline storage and handling equipment at loading facilities handling less than 20,000 gallons per day or at vehicle dispensing facilities that is not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	6. Portable drums, barrels, and totes provided that the volume of each container does not exceed 550 gallons.	
	7. All chemical storage tanks used to store a chemical with a true vapor pressure of less than or equal to 10 millimeters of mercury (0.19 psia).	

INSIGNIFICANT ACTIVITIES BASED ON EMISSION LEVELS

Description of Emission Units / Activities	Quantity
Emergency abort stack for each dryer line	2
Emergency abort stack for each Heat Energy System	2
Chipper and Rechippers (2)	3
Green Wood Storage Piles	2
Bark Storage Piles	2
Dry Shavings Storage Piles	2
Bark Unloading/Truck Dump	1
Screens/Hogs Transfer (Debarking)	1
Screens/Hogs Transfer (Chipping)	1
Dry Shavings Truck Dumper & Associated Transfer Points	1
Bark Disc Screener	1
Bark Sand Shaker	1
Sand Storage Piles	1
Bark/Sand Transfers	3
Green Chip Storage Silos	2

ATTACHMENT B (continued)**GENERIC EMISSION GROUPS**

Emission units/activities appearing in the following table are subject only to one or more of Georgia Rules 391-3-1-.02 (2) (b), (e) &/or (n). Potential emissions of particulate matter, from these sources based on TSP, are less than 25 tons per year per process line or unit in each group. Any emissions unit subject to a NESHAP, NSPS, or any specific Air Quality Permit Condition(s) are not included in this table.

Description of Emissions Units / Activities	Number of Units (if appropriate)	Applicable Rules		
		Opacity Rule (b)	PM from Mfg Process Rule (e)	Fugitive Dust Rule (n)

The following table includes groups of fuel burning equipment subject only to Georgia Rules 391-3-1-.02 (2) (b) & (d). Any emissions unit subject to a NESHAP, NSPS, or any specific Air Quality Permit Condition(s) are not included in this table.

Description of Fuel Burning Equipment	Number of Units
Fuel burning equipment with a rated heat input capacity of less than 10 million BTU/hr burning only natural gas and/or LPG.	8
Fuel burning equipment with a rated heat input capacity of less than 5 million BTU/hr, burning only distillate fuel oil, natural gas and/or LPG.	10
Any fuel burning equipment with a rated heat input capacity of 1 million BTU/hr or less.	0